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1923

# FORESTS AND WOODLANDS

## FOR THE SOUTH



*"The depletion of lumber in the United States has not resulted primarily from the use of our forests, but from their devastation."*

*W. B. GREELEY, Chief U. S. Forest Service.*

**OTTO KATZENSTEIN & CO.**

**TREE SEEDSMEN SINCE 1897**

**ATLANTA, GEORGIA**

# FORESTS AND WOODLANDS OF THE SOUTH

## OTTO KATZENSTEIN & CO.

TREE SEEDSMEN SINCE 1897

ATLANTA, GA.

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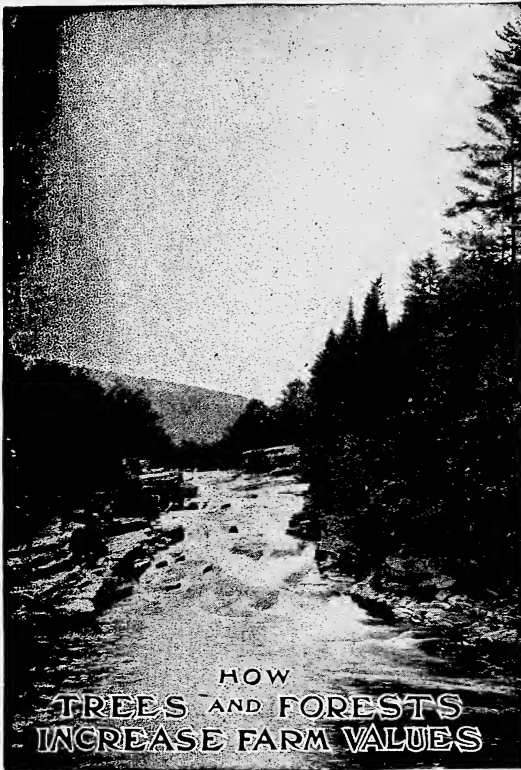
**B**LESSED as we of the South are with a wonderful climate, with soils of every desirable character and with native forest trees which are the envy of the world, it behooves us to awaken to the danger threatening our actual existence and caused by the ruthless exploitation of our forests which are the fundamental source of our prosperity. We must turn our minds seriously to the problems of practical reforestation. The demand and the prices for lumber have reached levels never dreamed of before, but only a comparatively small area of marketable trees remains to be drawn upon—and what then? There is actually no problem which touches everybody as closely as the continuous timber supply. The city dweller, the manufacturer, the farmer, where indeed will they be without an abundant supply of reasonably priced lumber?

Fortunately a good many of us have already awakened to the seriousness of the situation. A number of corporations and individuals are doing their share towards rebuilding our woodlands but unless every landowner gives more care to the reconstruction than to the destruction of our forests we will not derive full benefit from the farsightedness of the few. We must cease to think of a woodland as a one-crop property and must train ourselves to the possibilities arising from turning it into a field crop which can be harvested and replanted continuously.

Forestry along the right lines stands for regular and increasing dividends from the investment. These dividends will be found not only in actual money but also in the protection of streams and our arable lands. Forestry which does not bring such results would be a negligible fad. It would not be a practicable science.

Fortunately we have now many men who have been highly trained as foresters and it is a rather simple matter for land owners to permit themselves to be guided by the knowledge and experience of these experts in solving the problems of forest planting, management and harvest.

The following lines are written for the owner of waste lands who is not averse to utilizing them and adding thereby materially to the value of his property. If we should succeed in convincing only a few owners and encouraging them towards reforestation we shall feel well rewarded.



**H**APPY the man who wisely conserves his woodlands. He not only adds riches to his own farm, but he confers a blessing upon every human being that lives near any stream which flows through his farm or has its source on his grounds. Farms, villages, cities have the farmers along the banks of many rivers to thank for the even, uniform flow of the waters.

The saving of forests means the increased wealth for American farmers. Planting and growing trees, to replace the millions that have been uselessly wasted, is being recommended by Municipal, State and Government Commissions.

Men of training, experienced in forestry, are showing

the farmer that prevention of forest devastation is a money-making proposition affecting his individual interests.

Thousands of acres everywhere in our wide country are showing great declines in fertility and consequent land value. Unwise lumbering methods have denuded the lands, allowed streams to dry up and consequently the percentage of water available for growing crops has been greatly reduced.

There are many advantages to the farmer from planting forest and shade trees; for instance:

**1. Ornamentation.**—Paint, a clean lawn, good out-buildings, tidiness everywhere, well kept fences, rightly tilled fields, an abundance of ornamental, forest and shade trees mark the home of the far-sighted farmer. The value of such land is immediately apparent to the dullest observer. Such appearances, 99 times out of 100, are what sell a man's farm at a handsome profit.

Compare the dismal looking, treeless road and its borders of thistles, briars and tangled grass with the handsome rural thoroughfare bordered with trim maples, magnolias, pines, hemlocks, etc. Which would you choose to drive on?

**2. A Place for Song Birds.**—The farm without woodland and ornamental trees will be barren of the bug eaters—the song birds. The farmer who fails to encourage the birds to make their homes in the trees on his farm is short-sighted. They are bark and blossom protectors for fruit trees and many other farm products.



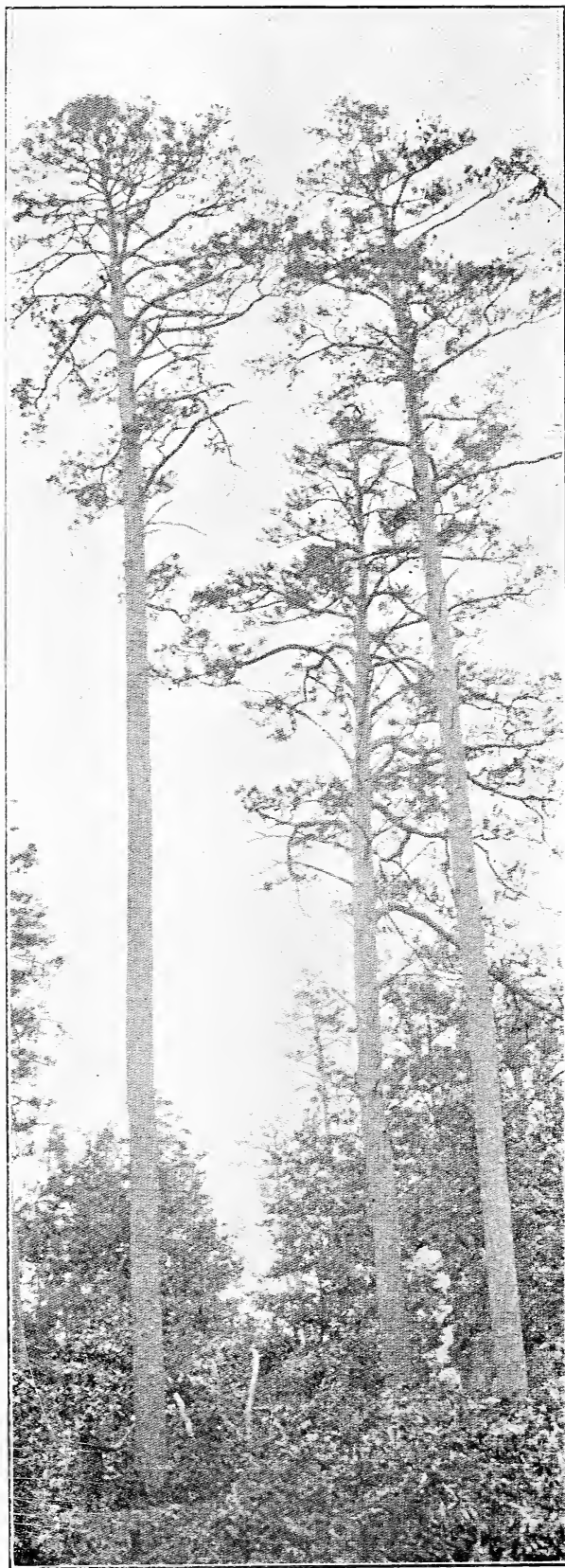
Longleaf Pine (*Pinus palustris*)

**3. Profits From Waste Places.** Many wornout fields, gullied hillsides and eroded lands can be made a savings bank, which in future years, will return high dividends to the depositor. The farmer who makes a small deposit today by planting seeds and seedlings of forest and shade trees will draw rapidly compound interest on his investment.

**4. Trees Promote Health.** The exhalation of the foliage of trees in giving out clean water and oxygen is well known. But here their sanitary value does not cease. They are ready absorbents of poisonous odors, of animal exhalations and effete, disease-producing gases. To make a farm home healthful, grow trees around the house. Begin at once.

**5. Screens From Winds.** Houses exposed to either hot or cold winds can be made doubly livable by planting a wind-break of conifers at the angle from which the wind comes. Winds blowing over forest and woodland are robbed of their terrors and strength. Their heat in summer is absorbed by the foliage which gives to the wind a delicate moisture so welcome to the lungs. In winter the force of frosty winds is broken by waving pines and hemlocks. Reduce coal bills, cut down your work on the wood pile in winter! Make your home cooler and sweeter in summer, Mr. Farmer!

**6. Shade for Cattle.** The dairyman, stockman or plain farmer may know that when his cattle or dairy herd are resting comfortably in the shade that the profit-giving



Shortleaf Pine (*Pinus echinata*)

milk is flowing into the bags in generous quantity or that fat and weight are rapidly increasing on his beef cattle.

There is nothing like comfort, rest and shade to make cattle money-coiners for farmers.

**7. Supply of Timber, Posts, Firewood, Etc.** Solid is the foundation that the farmer builds who looks years ahead and provides for himself and children ample woodlands for timber and other wood supplies. It is a short-sighted policy that many farmers are regretting that they have chopped thoughtlessly away at their bank accounts in the forests. Mr. Farmer, reforest your woodlands! Take time by the forelock!

**8. Forests Promote Stream Flow and Protect from Floods.** Don't let the little streams go unprotected. They are the greatest sources of wealth any man can have on his farm. Their best guardians are forests. Our Western deserts are the results of a lack of them. The rustling foliage in a forest is giving out hundreds of tons of water every hour. This enormous quantity makes clouds. In turn, the vapor from lakes, seas and oceans is attracted toward this rising vapor from forests. The result is plentiful rain and the forming of springs and babbling brooks. Mr. Farmer, keep the trees, feed their roots, increase the fertility of your lands through which the streamlets and brooks flow. Moreover, forests will preserve you from floods. How the citizens of the flood harassed sections would rejoice if the resources and water-sheds of their rivers were not so badly denuded of their forests!

The following short notes give sketchy descriptions of the uses of our best Southern trees and also of some of the most noteworthy trees growing wild in other parts of our wide country as well as in some foreign lands. Nothing of a complete character could, of course, be attempted within the space of these few pages. We have, however, taken pains to give the approximate number of seeds contained in a pound of each kind and also its average percentage of germination. This percentage will vary rather widely in different seasons, due to many conditions beyond human control.

Reforestation from seed is and always will be the most natural method and it has been our privilege and pride to supply tree planters in all parts of our globe with tree seeds now for a quarter century. Our experience is at all times at the command of our patrons and the booklet showing "How to Make Tree Seeds Grow" is gladly supplied them at request.

## **A FEW CONE BEARING TREES (Conifers) FOR FOREST AND ORNAMENTAL PLANTING IN THE SOUTH.**

### **FOR DRY SOILS.**

**PINUS ECHINATA** (*Pinus mitis*). Shortleaf Pine. Tall, very rapidly growing, extremely valuable forest tree, hardy as far as Massachusetts. 65,000 seeds; 50-75%.

**PINUS PALUSTRIS**, Longleaf Pine. Tall tree of very first importance for sandy soils. One of the finest woods. Is best sown where ultimately needed because the enormously long taproots make transplanting difficult. 7,500 seeds; 50-70%.

**PINUS TAEDA**, Oldfield or Loblolly Pine. From Delaware to Texas. Good timber. 18,000 seeds; 50-80%.

### **FOR MOIST SOILS.**

**ABIES BALSAMEA**, Balsam Fir. Slender, graceful tree for damp locations. Fair timber. 32,000 seeds; 30-50%.

**ABIES FRASERI**, She-Balsam Fir. Medium sized rare tree of North Carolina. Damp valleys. 40,000 seeds; 20-40%.

**PINUS CARIBAEA** (*P. cubensis*, *P. heterophylla*), Slash Pine. Tall tree of fast increasing popularity. Often cut with *P. palustris* as timber is of equal desirability. Best for plantings near coast. 17,000 seeds; 40-70%.

**PINUS STROBUS**, White Pine. Indispensable for forest in the East and West and very desirable in the mountains of the South, where where it can be grown profitably. 29,000 seeds; 65-90%.

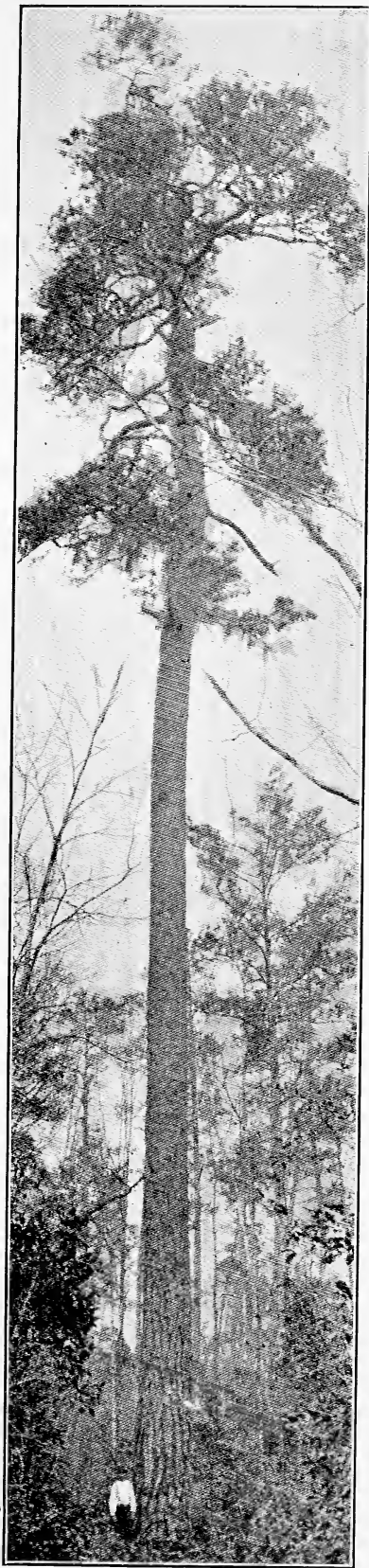
**TAXODIUM DISTICHUM**, Bald Cypress. Often of enormous size in swamp land. Cypress timber of fine grade. 5,000 seeds; 25-50%.

**TSUGA CANADENSIS**, Hemlock. For the moist valleys where it grows quickly and produces fair timber. Especially important now for paper pulp. 65,000 seeds; 30-60%. Western Hemlocks will do well in similar locations in the South.

**JUNIPERUS VIRGINIANA**, Red Cedar. Tree of very wide range and succeeding almost everywhere but doing best in rich soils. Greatly in demand for telegraph poles, ties, pencils, etc. Seed often lays over a year. 9000 seeds; 50-70%.

**PICEA EXCELSA**, Norway Spruce. Tall, rapid growing tree from Europe. Good grade of timber. Best in cool sections. Splendid windbreaks. 75,000 seeds; 60-80%.





Oldfield Pine (*Pinus teada*)

**PINUS LARICIO AUSTRIACA** (Austrian Pine). Very tall, rapid growing forest tree from Europe. Very popular in the Western States, but will do well in open planting South. 24,000 seeds; 60-70%.

**PINUS SYLVESTRIS**, Scotch Pine. One of the most popular European trees. Grows in any soil, but best in rich ground. Rapid grower. Ship masts, tar, turpentine. 35,000 seeds; 70-90%.

**PSEUDOTSUGA DOUGLASI**, Douglas Spruce. One of the quickest growing and most desirable trees of the Rocky Mountains and Northwest. Masts, lumber, tanning bark. Should do well in many parts of the South. 35,000 seeds; 60-80%.

**THUYA OCCIDENTALIS**, American Arborvitae. Particularly valuable for windbreaks and shelter for cooler sections. Fence posts, railroad ties, etc., 70,000 seeds; 50-70%.

**THUYA ORIENTALIS**, Chinese Arborvitae. Exceedingly quick growing tree. Very popular for ornamental planting. 25,000 seeds; 65-80%.

**CEDRUS DEODARA, CEDRUS ATLANTICA**. Deodar and Mt. Atlas Cedar are trees of the greatest value as ornamentals. They grow well and rapidly from seed. 4,500 seeds; 50-75%.

**GINGKO BILOBA**, Maidenhair Tree. Suitable for any soil. A quick growing tree from China particularly adapted to street planting. Timber has not been tried in this country to any extent. 280 seeds; 65-80%.

**PINUS PINASTER** (*maritima*). Cluster Pine. Handsome tree from Europe doing best in moderate temperature near the seaside. 10,000 seeds; 40-60%.

**PINUS CEMBRA**, Swiss Stone Pine. Very useful European tree for the covering of mountain sides. 2,000 seeds; 60-75%.

## HARDWOOD TREES.

**ACER**, Maple. A large family of valuable trees. *A. saccharum*, Sugar Maple, produces the Bird's-eye Maple of commerce, and is also a much planted street and lawn tree. 7,500 seeds; 30-50%. *A. platanoides*, Norway Maple, is one of the very best lawn and street trees. 6,500 seeds; 40-50%. *A. negundo*, Boxelder, a very rapid grower for shelter and also for streets. 15,000 seeds; 40-60%.

**AESCULUS**, Buckeye. Several species of good service for pulp. 36 seeds; 50-70%.

**CASTANEA DENTATA**, Chestnut. One of our best forest trees. Unfortunately much affected by blight. 100 seeds; 70-90%. Several kinds from Japan and China should be tried out in the South.

**CATALPA SPECIOSA**, Western Catalpa. One of the quickest growing trees known. Timber, ties, posts are produced rapidly. Care must be taken in the selection of the seed. 20,000 seeds; 40-70%.

**CELTIS OCCIDENTALIS**, Hackberry. Shade and lawn tree remarkably free from insects. Less known in the forest. Seed often lays over two years. 1,000 seeds; 70-80%. Other species of value come from China.

**CINNAMOMUM CAMPHORA**, Camphor Tree. One of the most important economic and ornamental trees for frost free sections. 3,500 seeds; 60-80%.

**CORNUS, Dogwood**. A large family of beautiful ornamentals. *C. florida*, the White Flowering Dogwood, is magnificent when in flower in early spring. It gives wood valuable for engraving (boxwood), wheels hubs, etc. 3,200 seeds; 65-85%.

**EUCALYPTUS**, Gum Tree. A great many kinds for frost free sections. Some do best in sandy soil, others near the sea coast, others around swamps. Tremendously fast growers, producing timber of the first importance for many uses. Very popular in Florida. 500,000 to a million seeds; 65-85%.

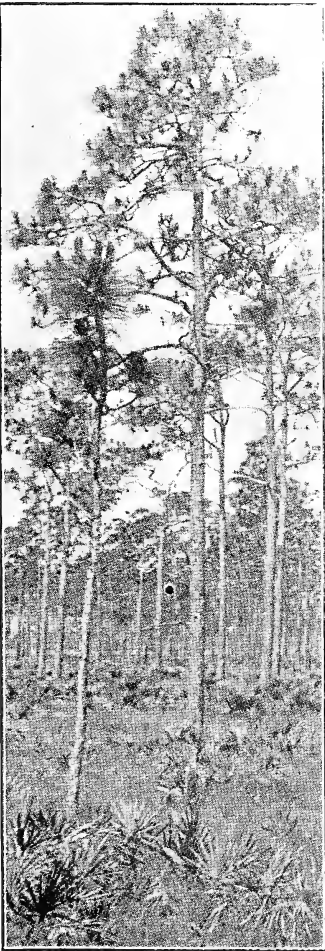
**FAGUS AMERICANA**, Beech. Majestic forest tree. Furniture, shoe lasts, fuel, etc. 1,800 seeds; 70-90%. The European Beech is planted here to some extent.

**FRAXINUS**, Ash. Family of important forest and ornamental trees. *F. americana*, White Ash, 24,000 seeds; 30-50%. *F. lanceolata*, Green Ash, 12,000 seeds; 30-50%. Agricultural implements, carriage building, golf shafts, oars, etc. Many other domestic and ornamental kinds of importance.

**GLEDITSIA TRIACANTHOS**, Honey Locust. Rapid grower for almost any soil. Wood very lasting under ground. Fence posts, etc. 3,000 seeds; 50-70%.

**HICORIA**, Hickory. Large family of invaluable forest trees doing best in rich soil. Wood very tough, for carriage building, agricultural implements, etc. 20 to 40 seeds; 50-75%.

**JUGLANS**, Walnut. Among our most important forest trees. Furniture, etc. *Juglans nigra*, Black Walnut, 30 seed. *Juglans cinerea*, Butternut, 16 seed, are best. *Juglans regia*, English Walnut, is not not so well adapted to general planting, as several Japanese kinds. 60-80%.



Slash Pine (*Pinus caribaea*)

**LIQUIDAMBAR STYRACIFLUA**, Sweet Gum. A lofty tree for low ground. Cabinet work. 85,000 seed; 50-75%.

**LIRIODENDRON TULIPIFERA**, Tulip Poplar. Rapid grower for low ground, but useful anywhere. Good timber, pulp. 9,000 seed; 5-10%.

**MAGNOLIA**—A family of very showy trees—some deciduous and some evergreen. Less important for forest than ornamentation. 2,000 to 3,000 seed; 50-85%.

**PISTACIA CHINENSIS**, Pistachio. A rather recent introduction from China of great value as ornamental. Not tried as yet in the forest. 7,000 seed; 50-70%. Not the tree producing the pistachio nut of commerce.

**NYSSA**, Tupelo. A family of trees doing best in moist ground. Wood particularly tough. Piles, wheel hubs, etc. 4,000 seeds; 50-75%.

**PLATANUS OCCIDENTALIS**, Sycamore. Rapid grower. Pulp, cigar boxes, butchers' blocks, etc. European species (*P. orientalis*) also very desirable. 1,250,000 seeds; 40-50%.

**QUERCUS**, Oak. An immense family of important tree. Some kind of oak for every condition of soil or climate. Backbone of every hardwood forest. Among the best for the South. White, Red, Chestnut, Spanish, Water Oak. 30-125 seeds; 60-90%.

**ROBINIA PSEUDACACIA**, \* Black Locust. Quick grower. Construction timbers, shipbuilding, posts. 3,000 seeds; 60-70%.

**TILIA AMERICANA**, Basswood. Valuable for forest and shade tree. Rich soil. Bees love its blossoms. Cheap furniture, paper pulp. Windbreaks. Inner bark for mattings and cordage. 6,500 seeds; 50-60%.

**ULMUS AMERICANA**, Elm. Fine tree for rich ground. Boat and shipbuilding. Flooring, coo-  
erage. 90,000 seeds; 50-75%.